# **BOWSER-MORNER. INC.**

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#### **Field Service Report**

Client:

Geo. Gradel Co.

3135 Front Street P. O. Box 8337

Toledo, Ohio 43605-0337

Project:

ENVIRONMENTAL AND GEOTECHNICAL SERVICES.

Westover Corp. Sanitary Landfill Site.

820-920 Otter Creek Road. Oregon, Lucas County, Ohio

Job No.:

150363

Report No.:

150363-0711-2952

Date of Report: October 25, 2011

**Author:** 

Thomas J. Kiger

Report Consists of 84 Pages

#### Ladies and Gentlemen:

The purpose of this report is to document environmental and geotechnical services performed for the above referenced project site. These services were conducted in accordance with Bowser-Morner Inc. (BMI) written proposal (Quote No. T-19311-Revised), dated February 26, 2010. Authorization to proceed with our services was given by Mr. John F. Gradel of the Geo. Gradel Co.

These services were in response to an Administrative Settlement Agreement And Order On Consent For Removal Action proceeding under sections 104, 106 (a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 USC 9604, 9606 (a), 9607, and 9622, (Consent Order) between the US EPA and the Westover Landfill, Geo. Gradel Co., (Gradel) respondent.

As stipulated by the Consent Order, these services were developed in a Maintenance Work Plan (Plan), BMI Report No. 150363-0610-2363, dated March 18, 2011.

In general, BMI's services consisted of consultation with US Environmental Protection Agency (US EPA) Region V, preparing the Plan, obtaining a City of Oregon Waste Water Treatment Plant (WWTP) waste hauler permit, coordinating and observing Plan activities, geotechnical evaluation of landfill slopes and report preparation to document completed Plan activities.

#### 2010 Activities

As performed and/or observed by Gradel, the subject site boundary was surveyed March 17, 18, 19, and 21, 2010. The leachate collection system east manhole loading pad was constructed using 120 tons of Concycle on May 10 and 11, 2010. The landfill sides and access road were filled, graded, and seeded May 12 and 19, 2010S.

T. J. Excavating & Tree Clearing cut and removed trees and brush from the landfill cap area and the old fence line and removed the old fence in preparation for installing a new fence. Subsequently, American Fence installed a new perimeter fence along Otter Creek Road and Old Millard Road (the existing gates were repaired and reused) during July, 2010.

The landfill cap was filled, graded, seeded, and mowed July 1, 6, 7, 8, 13, 15, 19, 26 and August 4, 2010. Depressions were filled and topped with 182 loads of lean clay and loamy soil. The *Gradel time cards and Subcontractor invoices* for this work are attached.

#### **2011 Activities**

The following documents leachate pumping and disposing, metal pipe repairs, soil sampling and testing, geotechnical evaluation of landfill slopes, concrete culvert repairs, rock letdown repairs, easement grading and seeding, mowing, and fence spraying conducted in 2011.

While certain landfill maintenance activities were attempted during the first quarter of 2011, inclement weather and precipitation delayed the start of field activities, which were conducted, for the most part, in the second quarter and the completed in the third quarter of 2011.

A field activities kickoff meeting conducted at the Gradel offices was attended by: Mr. Craig Chall, Health and Safety Manager of Gradel; Mr. Jon Gulch, On-Scene Coordinator of US EPA; Mr. TJ McFarland of Weston Solutions Inc. (Weston) the



US EPA Superfund Technical Assessment and Response Team (START) consultant; and Mr. Tom Kiger, Environmental Services Manager of BMI on May 4, 2011.

Major topics discussed included methane monitoring, contingency plans for elevated methane readings, contingency plans for metal pipe leachate outbreaks, worker stress from weather extremes, and sign-in/sign-out procedures. Leachate pumping, metal pipe repairs, sampling and testing, and geotechnical evaluating landfill slopes were subsequently initiated as described below.

#### **Leachate Pumping**

Mr. Kiger observed Gradel representatives pumping subject site leachate with transportation to and disposal at the WWTP on May 4, 5, 6, 11, 25, and June 1, 2 of 2011. Mr. McFarland also observed these activities during the first part of May, 2011.

Leachate pumping was accomplished using a portable electric generator, heavy-duty submersible pump, 3-inch hose, and 4,000-gallon tank truck from May 4 through June 2, 2011. The truck was originally identified as having a 5,000-gallon tank, but was later correctly identified as having a 4,000-gallon tank, which caused a field reporting error in the first two loads.

Two loads (reported to be 4,500 gallons each, but actually less than 4,000 gallons each) of leachate were hauled to the WWTP on May 4, 2011. The Eight loads of leachate were hauled to the WWTP on May 5, 2011. Seven loads of leachate were hauled to the WWTP on May 6, 2011. Eight loads of leachate were hauled to the WWTP on May 11, 2011. Seven loads of leachate were hauled to the WWTP on May 25, 2011. Seven loads of leachate were hauled to the WWTP on June 1, 2011. Eight loads of leachate were hauled to the WWTP on June 2, 2011.

As performed by Gradel and observed by BMI, 47 loads of leachate were pumped from the landfill and disposed at the WWTP during May and June 2011. For additional detail, please see the attached *Site Photographs* and *Leachate Pumping Results*.

The first three or four loads of leachate were similar in appearance to black coffee; however, the remaining loads of leachate were similar in appearance to pickle juice



(slightly cloudy). The numbers of leachate loads per day are affected by pump rate, road traffic and WWTP traffic.

Methane concentrations were continuously monitored at the east manhole during leachate pumping and were not above the 10 percent lower explosive limit (LEL). Methane gas concentrations were also periodically monitored at the metal pipe during leachate pumping.

During the first part of May, metal pipe methane gas concentrations were generally below the 10 percent LEL; however, occasionally they would "burp" to over 55,000 parts per million (ppm). Later in May and June, regular periodic monitoring of methane gas concentrations at the metal pipe was all below 10 percent LEL.

A utility pole (No. 5839) and electrical box were installed proximal the east manhole on May 20, 2011. The electric box was inspected by the City of Oregon and passed on May 31, 2011. The electric meter base was installed and final connection completed on June 17, 2011.

As performed and observed by Gradel, eight loads of leachate were pumped from the landfill and disposed of at the WWTP on June 22, 2011. This leachate pumping was accomplished using the new electrical service, heavy-duty submersible pump, 3-inch hose, and 4,000-gallon tank truck.

As performed and observed by Gradel, eight loads of leachate were pumped from the landfill and disposed of at the WWTP on July 6, 2011. Another seven loads of leachate were pumped from the landfill and disposed of at the WWTP on July 20, 2011. Pumping was halted because the leachate collection system at the landfill was pumped dry.

As performed and observed by Gradel, five loads of leachate were pumped from the landfill and disposed of at the WWTP on August 10, 2011. Pumping was halted because the leachate collection system was pumped dry.

As performed and observed by Gradel, three loads of leachate were pumped from the landfill and disposed of at the WWTP on September 7, 2011. Pumping was halted because the leachate collection system was pumped dry.



As performed and observed by Gradel, two loads of leachate were pumped from the landfill and disposed of at the WWTP on October 19, 2011. Pumping was halted because of rain and WWTP emergency overflow conditions.

Gradel performed and observed 33 loads of leachate pumped from the landfill and disposed of at the WWTP during June, July, August, September, and October 2011. The leachate collection system was pumped dry during the last three events; therefore, future leachate pumping will be performed less frequently and reported independently by Gradel.

For greater detail of all the loads of leachate pumped from the landfill leachate collection system and hauled to the WWTP, please see attached the WWTP Ticket Stubbs.

#### **Metal Pipe Repairs**

BMI representatives observed Gradel representatives clearing brush to access the metal pipe on May 25, 2011. Metal pipe repairs were observed by Mr. Gulch, Mr. Ryan Green of Weston, and Mr. Kiger on June 1, 2011.

Metal pipe repairs consisted of over-excavating the metal pipe mouth, attaching a flexible connector, attaching a pre-fabricated metal cap, and encasing all in an approximately 40-inch cube of Ohio Department of Transportation (ODOT) Class C Concrete. Metal pipe repairs were carried out as per the Plan and Plan Figure 1. The metal pipe mouth over-excavated soils appeared to be lean clay (as specified by the historical closure plans) and were contained in two full and two partially full 55-gallon drums.

The over-excavated lean clay soils did not appear to be discolored, odorous, or stained; and no trash or landfill debris was observed; however, both herbaceous and woody plants were growing in close proximity to the metal pipe mouth.

Upon over-excavating the metal pipe mouth, it was observed to contain a historic concrete plug, which had "bulged" a volume of concrete into the 7 o'clock position. During over-excavation, the concrete bulge was impacted by hand- shovel and a small diameter, but continuous trickle, of leachate emerged.



The bulged concrete needed to be removed for installation of the flexible connector and metal cap; however, there was concern for a larger leachate release. Therefore, in consultation with Mr. Gulch, it was decided to eliminate the flexible connector and metal cap and directly encase the metal pipe mouth in concrete.

As such, the metal pipe over-excavation was completed, and a plywood form approximately 40 inches square was erected and the metal pipe mouth was encased in approximately 1-1/3 cubic yards of ODOT Class C concrete.

While finishing the concrete surface, it was observed that a small diameter, but continuous trickle, of leachate had migrated through the interspatial voids of the liquid concrete and was emerging through the top of the formed concrete.

Subsequently, the recently formed "green" concrete was removed, the metal pipe mouth exposed, the bulged portion of the historically concrete plug removed, the flexible connector and metal cap installed, the form reinforced, and another batch of approximately 1-1/3 cubic yards of ODOT Class C concrete placed.

During flexible connector and metal cap installation approximately less than one gallon of leachate expressed into the bottom of the formed over-excavation. This leachate was incorporated using hand tools into the emplaced ODOT Class C concrete.

The newly-laid concrete was finished and no leachate was observed migrating through the concrete top or out the form edges. The two full and two partially full 55-gallon drums containing soil were transported via "bobcat" to old Millard Avenue and sampled per the Plan.

For additional detail, please see the attached Site Photographs.

#### Sampling and Testing

Oregon WWTP technicians periodically sampled the Westover leachate upon arrival at the WWTP with samples transported to Jones & Henry Laboratories, Inc. (Jones & Henry) and tested for biochemical oxygen demand (BOD) and chemical oxygen demand (COD).



Mr. Bob Martin, WWTP Manager, provided their lab tracking sheet. BOD results ranged from an initial high of 878 milligrams per liter (mg/l) to a low of 55 mg/l. COD results ranged from an initial high of 1,800 mg/l to a low of 379 mg/l. These BOD and COD results are well below the WWTP discharge limits allowed by their Ohio EPA permit. As such, additional leachate sampling and testing did not appear necessary.

For additional detail, please see the attached WWTP Lab Tracking Sheet.

The two full and two partially full 55-gallon drums of soil were staged proximal the east manhole behind the locked gate. The soil samples were transported to Jones & Henry and tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and Resource Conservation Recovery Act (RCRA) metals.

For additional detail, please see the attached Jones & Henry Laboratory Analytical Results. Sample hold time for VOCs and SVOCs is 14 days. Sample hold time for RCRA metals is six months, excepting mercury which is 28 days.

Review of the *Laboratory Analytical Results* revealed that relatively minor concentrations of methel-ethyl-ketone, arsenic, barium, chromium, and lead were detected. The elevated concentrations were compared to and found to be below the Ohio EPA Voluntary Action Program (VAP) commercial guidelines.

In accordance with the Plan, *Laboratory Analytical Results*, and VAP guidelines; the drummed over-excavated gray clay soils appear to be suitable for disposal upon the closed Westover Landfill.

Mr. Kiger observed the metal pipe repair to be free of leachate leaks on June 3, 6, and 22, 2011.

For additional detail, please see the attached Site Photographs.

#### Comments

The leachate test parameters BOD and COD were selected by Mr. Martin and Mr. Kiger as "litmus" or "canary" indicators; whereby consistently elevated concentrations would suggest that other leachate parameters may require evaluation.



On June 1, during metal pipe repair activities, Mr. Gulch agreed with Mr. Kiger that the over-excavated soils appeared to be homogenous in nature.

Metal pipe soil sample analytical results were e-mailed to Mr. Gulch on June 15, 2011. The over-excavated lean clay soils are the by product of a maintenance activity and, therefore, were not technically a solid waste.

The over-excavated soils were drummed, sampled, tested, found below the VAP guidelines, and disposed of upon the closed landfill near the leachate collection system east manhole.

#### Geotechnical Evaluation of Landfill Slopes

The Plan, Section 5.1, page 7 discusses Slope Stability Analysis as described below.

BMI performed Soil Investigation for Proposed Landfill at York, Millard, and Otter Creek Road, Job No. 1148 dated 1974. Report page I-5, paragraph 2, references the stability of proposed cut slopes. "It was calculated that the slopes should be stable with a factor of safety of approximately 1.25. For the purposes of this calculation, it was estimated that the existing gray till soils have shear strength of between 1500 and 2000 pounds per square foot and that the organic soils had zero shear strength."

J. Richard Hoppenjans, Chief Engineer, BMI, Toledo office has reviewed *Soil Investigation for Proposed Landfill at York, Millard, and Otter Creek Road*, the historic Westover landfill plans approved by OEPA, and performed a site reconnaissance in 2010. In his professional opinion, the closed landfill side slopes are stable and will likely not need to be re-graded.

#### Methane Vent Repairs

Review of the OEPA approved Westover Landfill plans indicates methane vents were more or less evenly spaced around the landfill cap perimeter. According to the plans, methane vents were constructed of a lower metal riser, upper plastic riser, and plastic rain cap. When Weston conducted their original sampling and field observations, they



indicted that some methane vents were broken. The subsequent US EPA Consent Order mandated broken methane vent repairs.

BMI field observation indicates that there are 18 methane gas vents, which were subsequently numbered (for discussion purposes) counterclockwise starting at the leachate collection system east manhole. Methane vents 6, 7, 8, 10, 11, 12, 13, and 17 appeared to be lacking parts of their upper risers and/or rain caps. Gradel site reconnaissance activities found the missing upper risers and rain caps scattered about the landfill cap. Subsequently, a Gradel employee repaired methane vents 6, 7, 8, 10, 11, 12, 13, and 17 by reattaching the upper risers and/or rain caps on July 28, 2011.

#### **Concrete Culvert Improvements**

Review of the OEPA approved Westover Landfill plans indicates Otter Creek Road stormwater runoff drains into a ditch that flows along the south edge of the landfill, through a 30" concrete culver and into Otter Creek. When Weston conducted their original sampling and field observations, they indicted that the concrete culvert was broken. The subsequent US EPA Consent Order mandated concrete culvert repairs.

BMI field observation indicates that there is an easement from York Street along the east side of Otter Creek. The concrete culvert allows the easement to cross over the ditch and reach a utility pole at the southeast upper corner of the landfill. What appeared to be a concrete culvert broken joint was actually a larger piece of concrete culvert slipped over the end of the 30" concrete culvert to help conduct water to Otter Creek and prevent erosion.

As performed by Gradel and observed by BMI, the concrete culvert was improved on August 3, 2011. The larger piece of concrete culvert was removed. Soil over the top of the 30" concrete culvert was removed. The joints of 30" concrete culvert were tightened. The top of the 30" concrete culvert and the bottom of the ditch from the culvert to Otter Creek were topped with geotextile material and covered with approximately 20 tons of 4 x 8 inch crushed limestone rip-rap. Back on top of the 30" concrete culvert, the soil was replaced and graded to re-form the easement back up to the utility pole.



#### **Rock Letdown Improvements**

Review of the OEPA approved Westover Landfill plans indicates there are three rock letdowns (south, central, and north) along the west side of the landfill. BMI field observation indicates that there also was an area of broken concrete around a methane vent at the southeast corner of the landfill. As performed by Gradel and observed by BMI, the area proximal the southeast methane vent and the three rock letdowns were cleared of brush or bushes, dressed with additional 40 tons of 4 x 8 inch crushed limestone rip-rap, graded, and compacted on August 5, 2011. As reported by Gradel, approximately 10 tons of rip-rap was emplaced at each location.

#### Final Site Reconnaissance

Mr. Jon Gulch of US EPA, Mr. TJ McFarland of Weston, Mr. Craig Chall of Gradel, and Mr. Tom Kiger of BMI conducted a final site reconnaissance on August 25, 2011. Mr. Gulch indicated that all of the Plan items were completed to his satisfaction.

All methane vents appeared to be undamaged. Ditch water flowing through the 30" concrete culvert appeared to be clear. Rock letdowns appeared brush free and neatly dressed. No leachate was observed to be leaking proximal the metal pipe concrete repair. The landfill was freshly mowed and perimeter fence weeds were observed to be dying.

Although not required by the Plan, Mr. Gulch suggested grass seeding the graded easement soil over the 30" concrete culvert and eliminating two metal mowing obstacles from the top of the landfill. Subsequently, as performed and observed by Gradel, the easement graded soils were grass seeded with straw cover, and the two metal mowing obstacles were removed on August 30, 2011.

#### Findings and Conclusions

During 2010, the landfill was surveyed; trees and brush cleared; east manhole loading pad constructed; top and sides filled, graded, and seeded; old fence removed, and new perimeter fence installed.



Eighty loads (approximately 320,000 gallons) of leachate were pumped from the closed Westover Landfill, transported and properly disposed of at the City of Oregon WWTP during May, June, July, August, September, and October 2011. The landfill leachate collection system was pumped dry on multiple occasions; therefore, future leachate pumping will be less frequent and reported independently by Gradel.

The metal pipe at the northeast corner of the landfill was successfully capped and encased in approximately 1-1/3 yards of ODOT Class C concrete. Subsequent field observations indicate no leachate leaking from the capped and encapsulated metal pipe.

Over-excavated soils were drummed, sampled, tested, found below the VAP guidelines, and disposed of upon the closed landfill near the leachate collection system east manhole.

The original geotechnical report was reviewed and additional field observations conducted by the BMI Chief Geotechnical Engineer. The closed landfill slopes appear to be stable and do not need to be regarded at this time.

The methane gas vents were repaired to be as good as originally designed.

The 30" concrete culvert was torn apart and reconstructed to be better than originally designed with the addition of geotextile fabric and 4 x 8 inch crushed limestone rip-rap.

The rock letdowns were refurbished to be as good as originally designed, and the area proximal the southeast methane vent was upgraded to be better than originally designed.

In addition, the non-Plan items mentioned by Mr. Gulch were addressed by Gradel in a timely manner.

In our professional opinion, the above described landfill maintenance activities have been performed in satisfaction of the Administrative Settlement Agreement And Order On Consent For Removal Action proceeding under sections 104, 106 (a), 107, and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 USC 9604, 9606 (a), 9607, and 9622, (Consent Order) between the US EPA and the Westover Landfill, Geo. Gradel Co., respondent, and the Maintenance Work Plan (Plan).



Based on the information presented within this report and consultation with Mr. Jon Gulch, On-Scene Coordinator, US EPA, it is BMI's opinion that Respondent Geo. Gradel Co., has complied with both the Consent Order and the Plan.

We trust that the information presented within this report is sufficient for US EPA's project oversight needs. If you have any questions, please contact the undersigned.

Respectfully submitted,

BOWSER-MORNER, INC.

Thomas J. Kiger Environmental Services Manager

J. R. Hopheyan J. Richard Hoppenjans, P.E., F. ASCE, D. GE Vice President, District Manager, Chief Engineer

TJK/JRH:elb/mlj

Attachments: Gradel time cards and Subcontractor invoices for 2010

Site Photographs

Leachate Pumping Results WWTP Ticket Stubbs WWTP Lab Tracking Sheet Laboratory Analytical Results Chain of Custody Record

2-Geo. Gradel Co. (1 bound copy and 1 .pdf copy on disc via US mail)

2-Eastman & Smith, Ltd., Attn: Richard T. Sargeant, Esq. (1 bound copy and 1 .pdf copy on disc via US mail)

2-US EPA, Region V, Attn.: Mr. Jon Gulch, On-Scene Coordinator (1 bound copy and 1 .pdf copy on disc via US mail)



### R390MARCH

## Geo. Gradel Co.

### WESTOVER

DESCRIPTION	HOURS	RATE AMOUNT
03//17/10 (Wednesday)		
SURVEYOR (ZEMENSKI)	5.0 HRS ST	
SURVEYOR (BOETTGER)	5.0 HRS ST	
03/18/10 (Thursday)		
SURVEYOR (ZEMENSKI)	8.0 HRS ST	
SURVEYOR (BOETTGER)	8.0 HRS ST	
03/19/10 (Friday)		
SURVEYOR (ZEMENSKI)	8.0 HRS ST	
SURVEYOR (BOETTGER)	8.0 HRS ST	
03/21/10 (Monday)		
SURVEYOR (ZEMENSKI)	8.0 HRS ST	
SURVEYOR (BOETTGER)	8.0 HRS ST	
06/23/10 (Tuesday)		
SURVEYOR (ZEMENSKI)	8.0 HRS ST	
SURVEYOR (BOETTGER)	4.0 HRS ST	

# TOTAL AMOUNT DUE \$

### Geo. Gradel Co.

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GRASS SEED

11 TV) I () A TW			
DESCRIPTION	HOURS	RATE	AMOUNT
05/10/10 (Monday)			
20 x 50 AREA STRIP SOD & TOP SO	IL. Use backhoe and	put grindir	igs down.
Fine grade and roll.			
303 MINI EXCAVATOR/OPERATOR	4.0 HRS ST		
FORD BACKHOE/OPERATOR	4.0 HRS ST		
400 RAYGO ROLLER/OPERATOR	2.0 HRS ST		
LABORER	10.0 FRS ST		
05/11/10 (Tuesday)			
PAVE AREA AT SHOP 20 x 50 IN TV	VO LIFT AND BUILI	CURB A	ROUND
3 SIDE.			
BOMAG PAVER/OPERATOR	8.0 HRS ST		
138 BOMAG ROLLER/OPERATOR	8.0 HRS ST		
LABORER	8.0 HRS ST		
LABORER	6.0 HRS ST		
LABORER	6.0 HRS ST		
SINGLE AXLE DUMP TRUCK	6.0 HRS		•
PLATE TAMP (SMALL)	1.0 SHIFT		
FOREMAN	8.0 HRS ST		
05/12/10 (Wednesday)			
BACKFILL AROUND 2 SIDE WITH	TOP SOIL AND SEE	D AND GE	RADE ROAD
IN FRONT GRINDINGS AND ROLL.			
DSM CAT DOZER/OPERATOR	6.0 HRS ST		
400 RAYGO ROLLER/OPERATOR	1.0 HRS ST		
FORD BACKHOE/OPERATOR	2.0 HRS ST		
LABORER	8.0 HRS ST		
FOREMAN	8.0 HRS ST		
YAR	D STOCK		
DESCRIPTION QU	ANTITY RA		
GRINDINGS (NO TRUCKING)	20.0 TONS		
AD ACC CEED	10.01.00		

# MATERIAL/SUBCONTRACTOR/RENTAL EQUIPMENT

10.0 LBS

SUPPLIER	INVOICE	DATE	AMOUNT
HP STREICHER	858685	05/19/10	1.853.12

**TOTAL AMOUNT DUE \$9,021.42** 

### R390JULY

### Geo. Gradel Co.

### WESTOVER

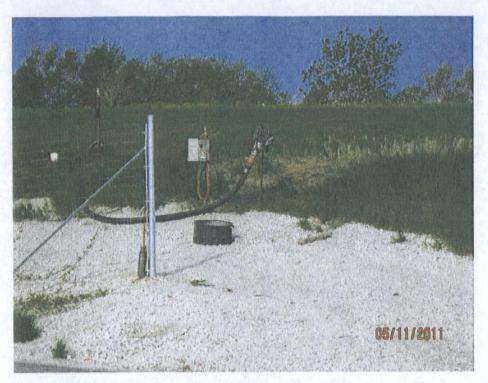
DESCRIPTION	HOURS	R	ATE	AMOUN'	Γ
07/01/10			****		
MOWER/OPERATOR	2.0 HRS ST				
850 CASE DOZER/OPERATOR	4.0 HRS ST				
FOREMAN (MARC GRADEL)	2.0 HRS ST				
07/06/10					
850 CASE DOZER/OPERATOR	8.0 HRS ST				
FOREMAN (MARC GRADEL)	8.0 HRS ST				
07/07/10					
850 CASE DOZER/OPERATOR	8.0 HRS ST				
BOBCAT SKID LOADER/OPERATOR	8.0 HRS ST				
FOREMAN (MARC GRADEL)	8.0 HRS ST	cates are at a torres			
07/08/10					
850 CASE DOZER/OPERATOR	8.0 HRS ST				
FOREMAN (MARC GRADEL)	8.0 HRS ST				
07/15/10					
850 CASE DOZER/OPERATOR	5.0 HRS ST				•
FOREMAN (MARC GRADEL)	1.0 HRS ST				
07/26/10					
850 CASE DOZER/OPERATOR	4.0 HRS ST				
FOREMAN (MARC GRADEL)	2.0 HRS ST				
CONCYCLE	120.0 TONS				

## MATERIAL/SUBCONTRACTOR/RENTAL EQUIPMENT

SUPPLIER	INVOICE	DATE	AMOUNT
LUCETRUCKING	21772	07/13/10	2,650.50
LUCETRUCKING	21777	07/19/10	992.00
LUCETRUCKING	21784	08/04/10	155.00
			3,797.50

TOTAL AMS

	; ; ;



Photograph 1
Westover Landfill, main gate, east manhole. Note 3-inch hose and drip pan.



Photograph 2 Water level meter and four gas meter at east manhole.





Photograph 3
Generator for 3-inch submersible pump.



Photograph 4
Geo. Gradel Co. 4,000-gallon tank truck (side view).





Photograph 5
Geo. Gradel Co. 4,000-gallon tank truck (rear view).



Photograph 6
Utility pole with inspected meter base proximal east manhole.



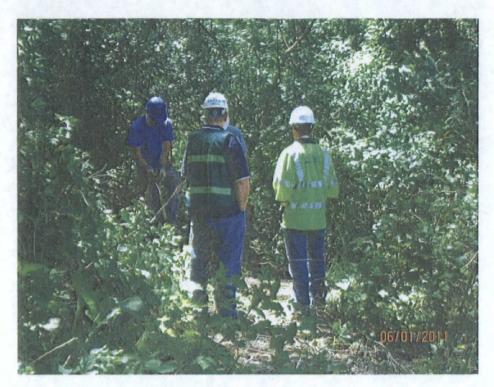


Photograph 7
Geo. Gradel Co. "bobcat" staged on site (side view).



Photograph 8 South view of path leading to metal pipe.





Photograph 9
USEPA and S. T. A. R. T. consultant observing metal pipe excavation.

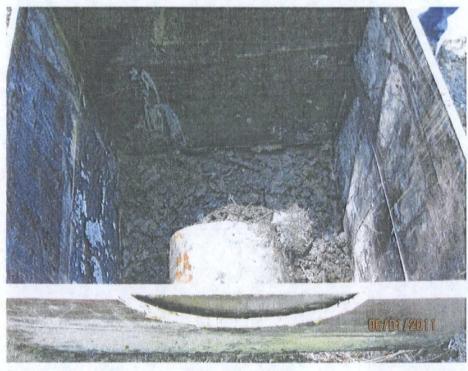


Photograph 10
Beginning of metal pipe excavation. Note absence of leachate.





Photograph 11 Continuation of metal pipe excavation. Note concrete "bulge" at 7 o'clock position.



Photograph 12 Formed metal pipe excavation. Note concrete "bulge" at 7 o'clock position.





Photograph 13

Metal pipe with flexible coupling and metal cap installed. Note relatively small amount (<1 gallon) of leachate.



Photograph 14 Concrete delivery to subject site.





Photograph 15 Concrete being loaded into "bobcat".



Photograph 16 "Bobcat" dropping concrete into form.





Photograph 17 Concrete in form partially surrounding metal pipe, flexible coupling, and metal cap.



Photograph 18
Metal pipe repairs within formed concrete.



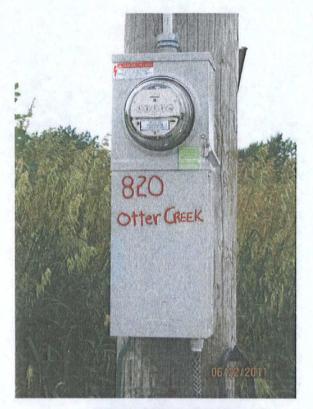


Photograph 19 Completed metal pipe repairs (north view).

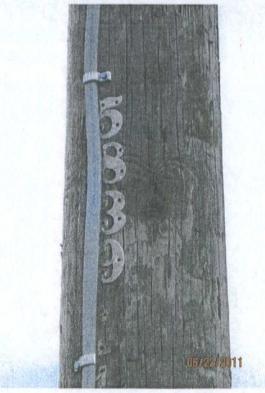


Photograph 20 Geo. Gradel Co. employees at end of job well done.





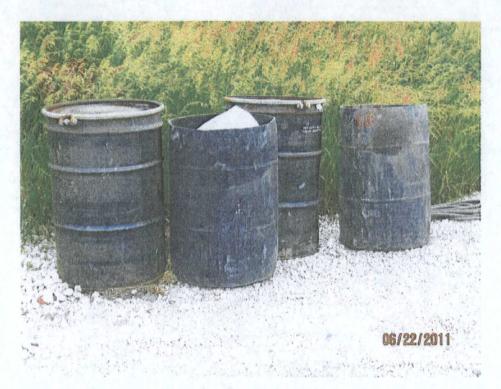
Photograph 21 Completed electrical service.



Photograph 22 Utility Pole No. 5839.







Photograph 23 Staged drums proximal east manhole.



Photograph 24
Final observation of repaired metal pipe. No leachate noted.





Photograph 25 Landfill cap mowing (typical).

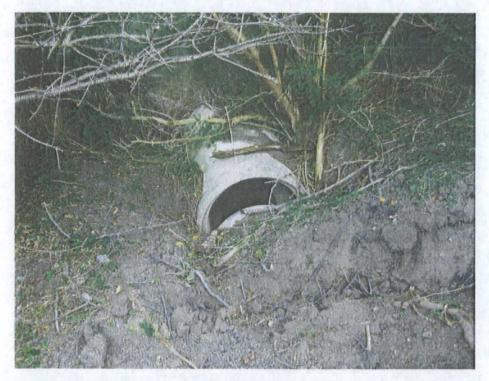


Photograph 26 Landfill cap mowing (typical).





Photograph 27 Clearing access to concrete culvert,



Photograph 28
Overview of larger and smaller concrete culvert.





Photograph 29
Tightened concrete culvert joint.



Photograph 30 Spreading geotextile over culvert top and ditch bottom.





Photograph 31
Anchoring and compacting geotextile material.



Photograph 32
Placing rip-rap over concrete culvert.





Photograph 33 Placing rip-rap over ditch bottom.



Photograph 34
Completed rip-rap over culvert top and ditch bottom.



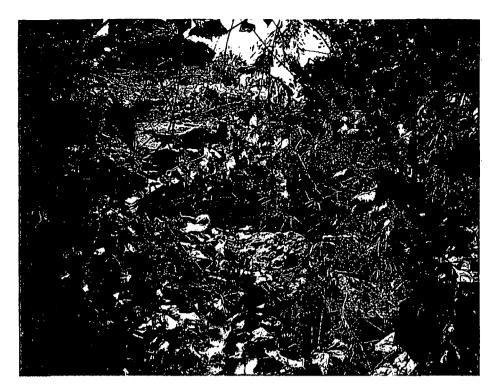


Photograph 35
Grading easement over concrete culvert.



Photograph 36
Completed easement over concrete culvert.





Photograph 37
Rock letdown before improvements (typical).



Photograph 38 Rock letdown during improvements (typical).





Photograph 39
Rock letdown during improvements (typical).



Photograph 40
Rock letdown after improvements (typical).





Photograph 41
Rock letdown and methane vent after improvements.



Photograph 42 Methane vent after improvements (typical).



## Leachate Pumping Results, Westover Corp. Sanitary Landfill Site, 820-920 Otter Creek Road, Oregon, Lucas County, Ohio Job Number 150363

Trip	_ :	Start	Pump Start	Pump Stop	Stop
Number*	Date	Level**	Time	Time	Level***
11	05/04/11	5.1	11:18	11:32	7,1
2	05/04/11	6.5	1:59	1:14	7.9
3	05/05/11	6.2	8:22	8:37	8.6
4	05/05/11	7.1	9:15	9:29	9.3
5	05/05/11	7.6	10:03	10:17	9.8
6	05/05/11	8.0	10:48	11:02	10.3
7	05/05/11	8.5	12:14	12:30	9.3
8	05/05/11	8.7	1:02	1:19	10.7
9	05/05/11	9.2	1:53	2:11	11.1
10	05/05/11	9.4	2:49	3:08	11.2
11	05/06/11	7.7	8:10	8:25	10.3
12	05/06/11	8.6	8:59	9:14	11.2
13	05/06/11	8.7	10:00	10:14	11.7
14	05/06/11	9.2	10:53	11:07	12.2
15	05/06/11	9.2	12:40	12:57	11.7
16	05/06/11	9.8	1:26	1:43	11.4
17	05/06/11	9.8	2:22	2:40	11.3
18	05/11/11	7.1	8:19	8:34	9.4
19	05/11/11	7.9	9:11	9:26	10.3
20	05/11/11	9.4	9:56	10:11	10.6
21	05/11/11	8.8	10:41	10:55	10.9
22	05/11/11	8.9	11:59	12:14	10.9
23	05/11/11	9.2	12:44	12:58	11.3
24	05/11/11	9.7	1:34	1:50	11.4
25	05/11/11	10.1	2:20	2:37	12.1
26	05/25/11	6.0	8:30	8:45	7.4
27	05/25/11	7.4	9:25	9:39	9.1
28	05/25/11	7.2	10:10	10:28	9.5
29	05/25/11	7.7	11:08	11:20	10.1
30	05/25/11	7.7	12:30	12:54	10.7
31	05/25/11	8.2	1:30	1:45	11.3
32	05/25/11	8.6	2:17	2:33	11.6
33	06/01/11	5.9	8:05	8:22	8.6
34	06/01/11	6.6	9:09	9:26	9.3

<sup>\*</sup> Trip = 4,000 gallons \*\* Level = feet and tenths

<sup>\*\*\*</sup> From top of manhole

## Leachate Pumping Results, Westover Corp. Sanitary Landfill Site, 820-920 Otter Creek Road, Oregon, Lucas County, Ohio Job Number 150363

Trip		Start	Pump Start	Pump Stop	Stop
Number*	Date	Level**	Time	Time	Level***
35	06/01/11	6.9	10:09	10:25	8.1
36	06/01/11	7.3	10:50	11:07	9.8
37	06/01/11	7.3	12:35	12:50	10.1
38	06/01/11	8.1	1:25	1:45	11.4
39	06/01/11	7.9	2:19	2:40	11.5
40	06/02/11	7.4	8:01	8:20	9.4
41	06/02/11	8.2	8:57	9:14	10.7
42	06/02/11	8.5	9:44	10:00	11.2
43	06/02/11	9.0	10:30	10:47	10.9
44	06/02/11	9.2	11:17	11:32	11.4
45	06/02/11	9.1	12:46	1:01	11.2
46	06/02/11	9.6	1:32	1:49	11.6
47	06/02/11	9.9	2:21	2:38	11.7
48	06/22/11	N/A	8:05	8:20	N/A
49	06/22/11	N/A	9:00	9:15	N/A
50	06/22/11	N/A	9:45	N/A	N/A
51	06/22/11	N/A	10:36	· N/A	N/A
52	06/22/11	N/A	N/A	11:30	N/A
53	06/22/11	N/A	12:55	1:10	N/A
54	06/22/11	N/A	1:45	N/A	N/A
55	06/22/11	N/A	2:35	2:51	N/A
56	07/06/11	N/A	7:40	7:55	7.9
57	07/06/11	7.3	9:04	9:20	10.0
58	07/06/11	9.0	N/A	N/A	N/A
59	07/06/11	9.6	N/A	N/A	N/A
60	07/06/11	9.8	N/A	N/A	N/A
61	07/06/11	10.1	N/A	N/A	N/A
62	07/06/11	10.7	1:50	2:12	11.3
63	07/06/11	11.2	N/A	N/A	12.4
64	07/20/11	7.0	8:04	8:19	9.2
65	07/20/11	7.10	9:02	9:18	10.1
66	07/20/11	8.3	N/A	N/A	10.4
67	07/20/11	9.4	N/A	N/A	11.0
68	07/20/11	8.2	12:35	1:02	10.10

<sup>\*</sup> Trip = 4,000 gallons \*\* Level = feet and tenths

<sup>\*\*\*</sup> From top of manhole

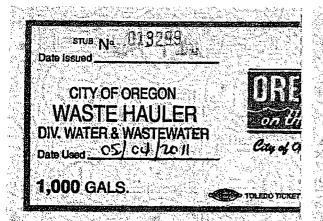
## Leachate Pumping Results, Westover Corp. Sanitary Landfill Site, 820-920 Otter Creek Road, Oregon, Lucas County, Ohio Job Number 150363

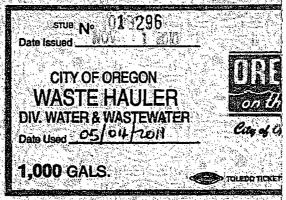
Trip Number*	Date	Start Level**	Pump Start Time	Pump Stop Time	Stop Level***	
69	07/20/11	9.7	2:00	2:20	11.3	
70	07/20/11	11.2	N/A	N/A	11.8	
71	08/10/11	7.0	9:32	9:47	8.10	
72	08/10/11	8.9	10:32	10:49	10.0	
73	08/10/11	8.2	11:40	11:54	11.6	
74	08/10/11	8.9	12:40	1:02	10.8	
75	08/10/11	10.6	1:40	2:23	11.3	
76	09/07/11	N/A	N/A	N/A	N/A	
77	09/07/11	N/A	N/A	N/A	N/A	
78	09/07/11	N/A	N/A	N/A	N/A	
79	10/18/11	6.1	8:43	8:59	8.4	
80	10/18/11	7.3	9:38	9:55	9.4	
	Below rows for future use.					
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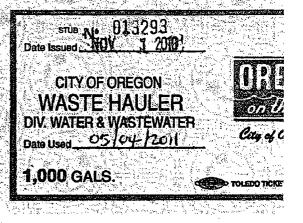
<sup>\*</sup> Trip = 4,000 gallons

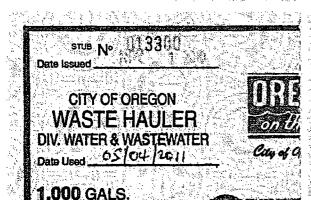
<sup>\*\*</sup> Level = feet and tenths

<sup>\*\*\*</sup> From top of manhole

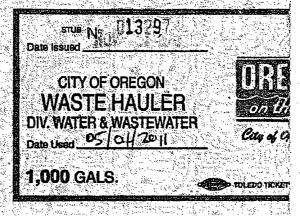


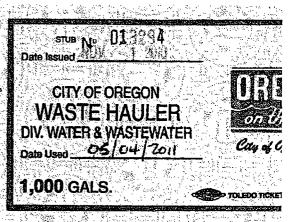


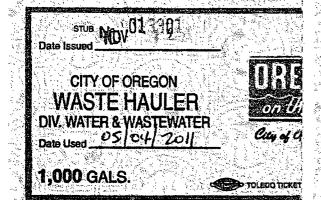


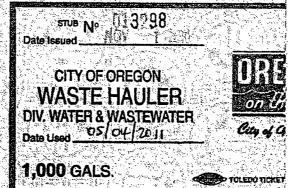


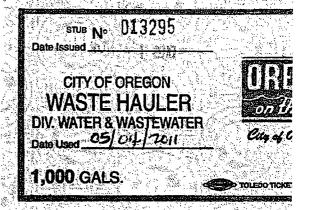
TOLEDO TICKET

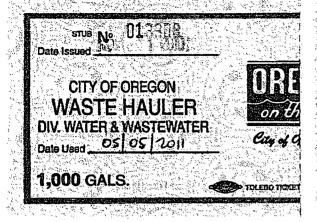


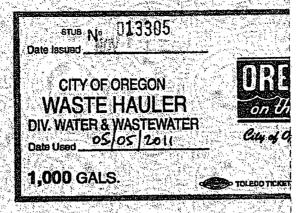


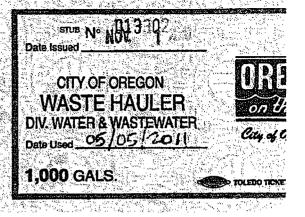


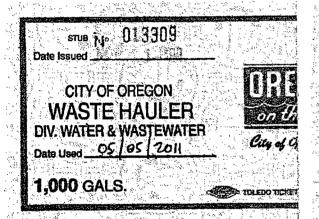


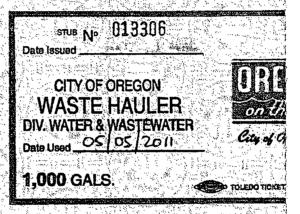


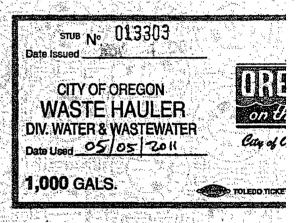


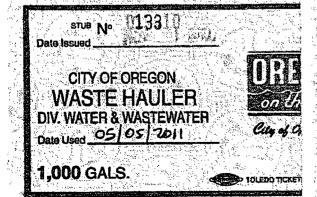


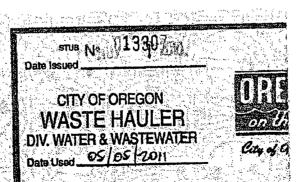




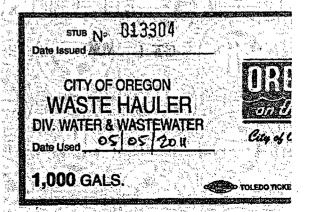


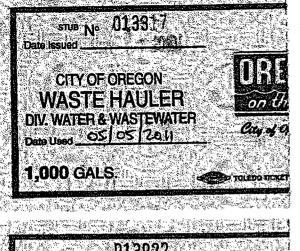


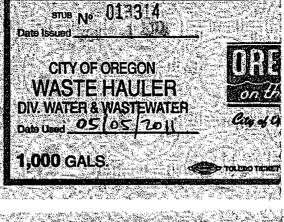


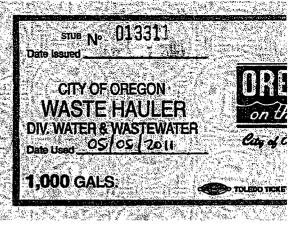


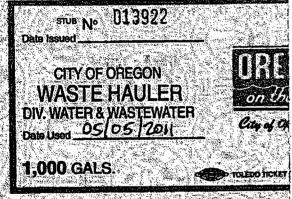
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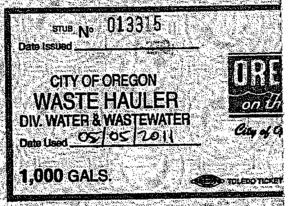


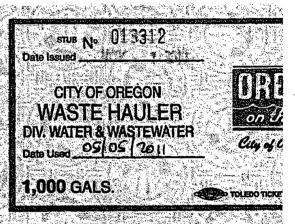


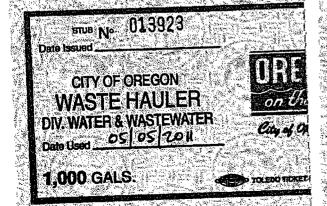


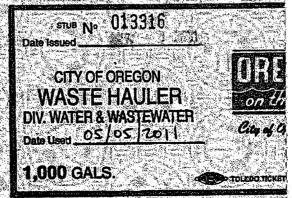


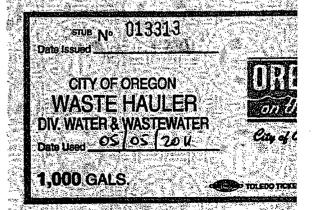


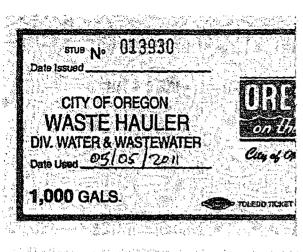


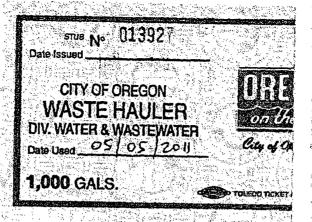


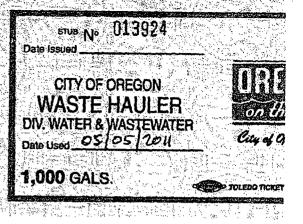


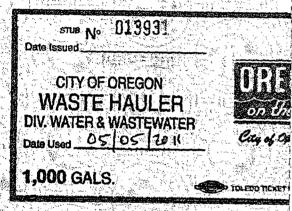


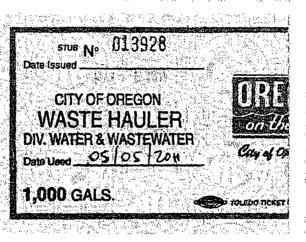


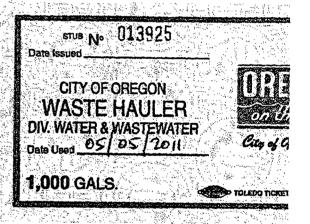


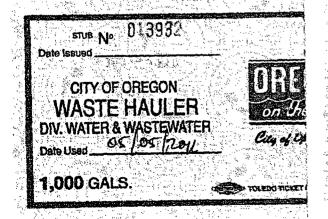


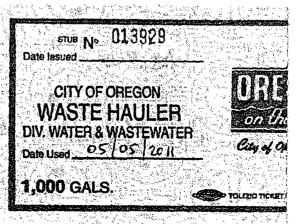


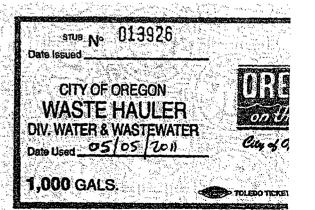




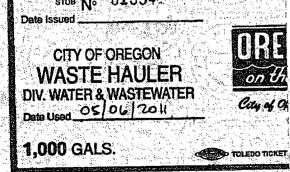


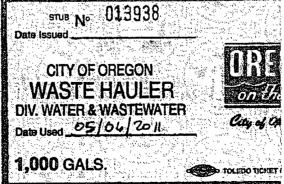


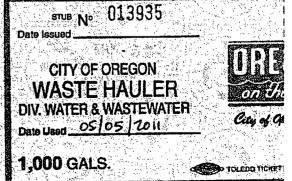


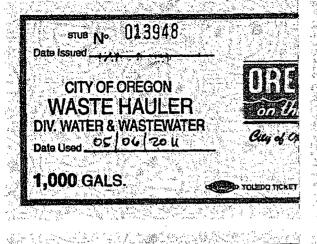


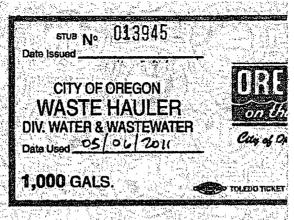


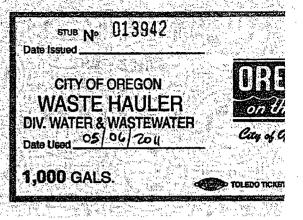


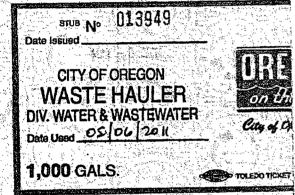


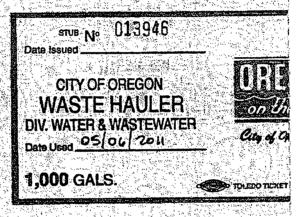


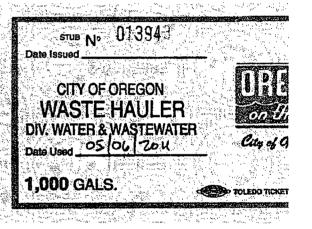


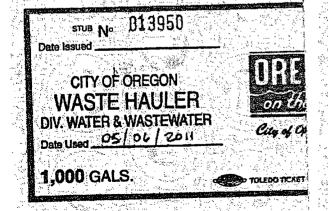


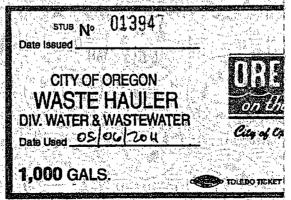


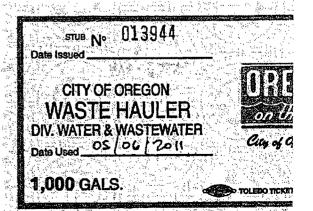






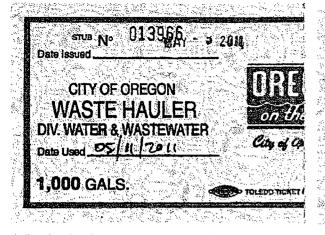


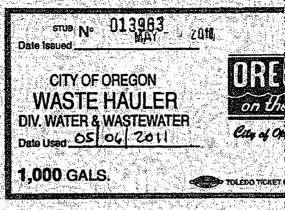


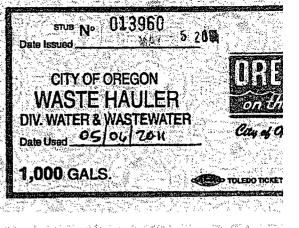


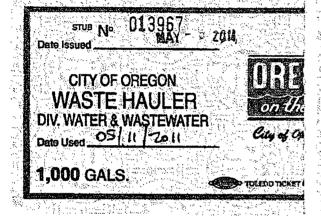


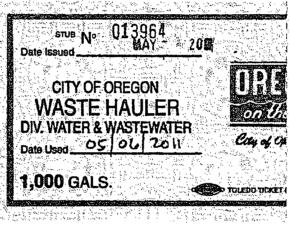
TOLEDO TICKET

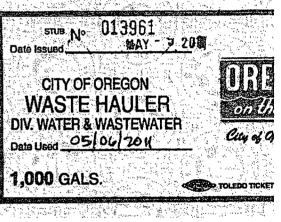


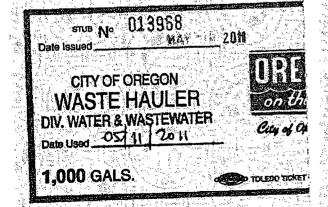


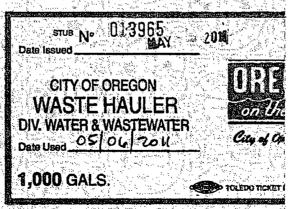


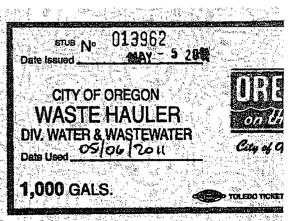




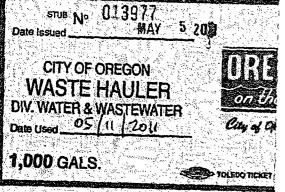


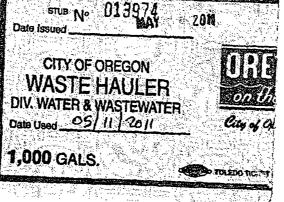


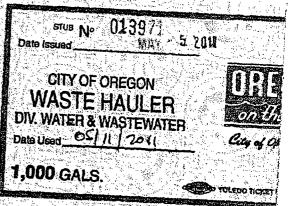






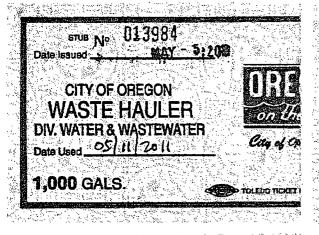


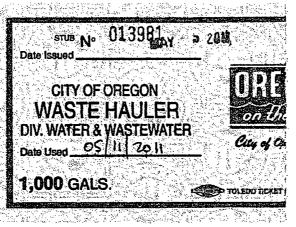


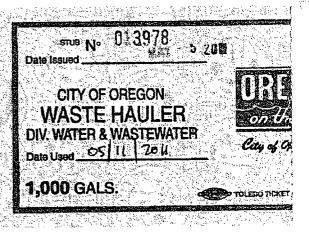


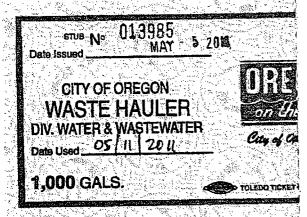
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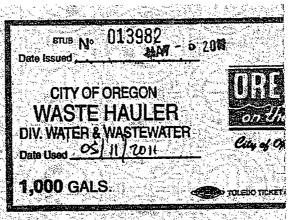
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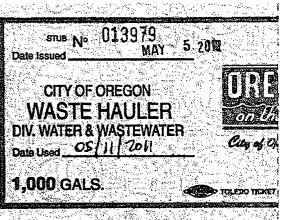


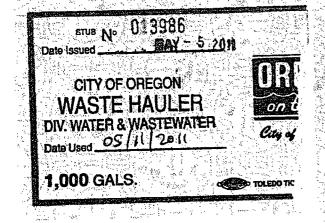


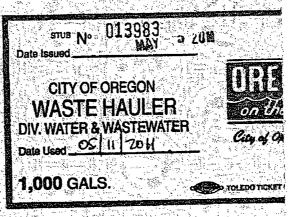


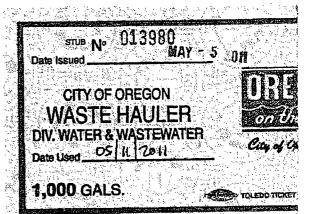


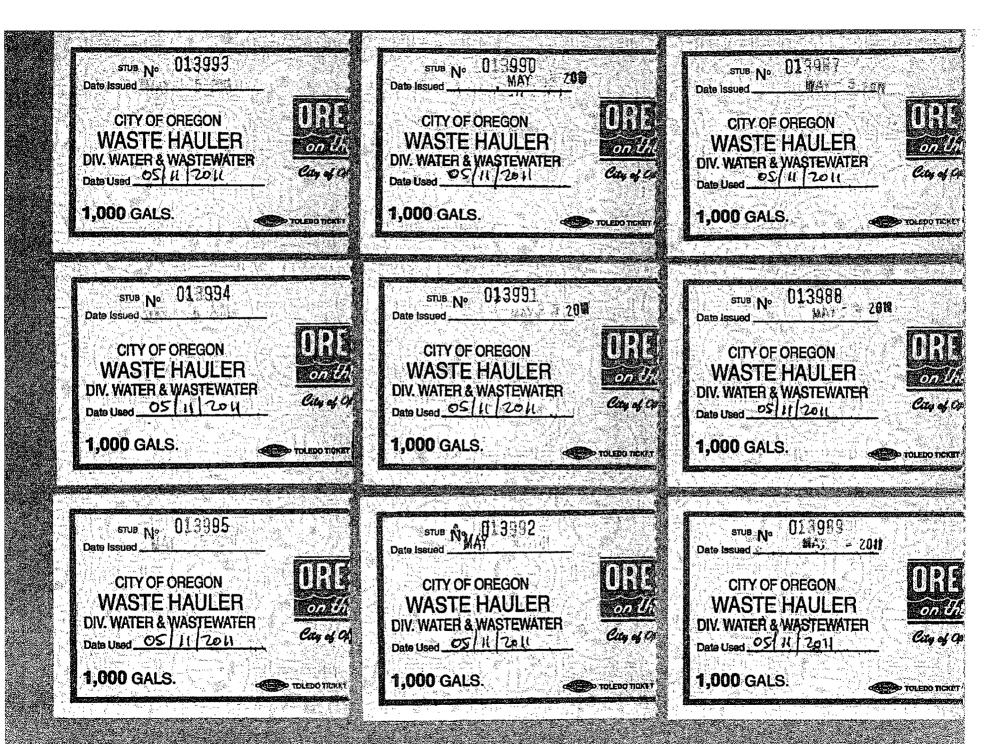










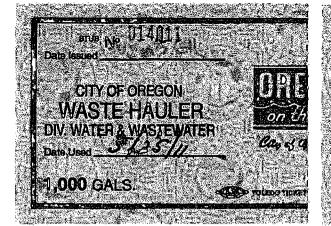


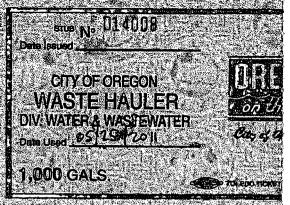


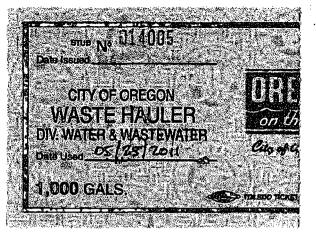
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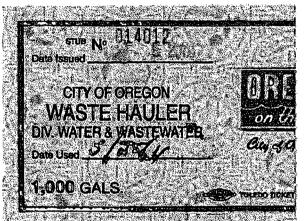
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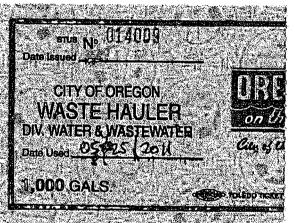


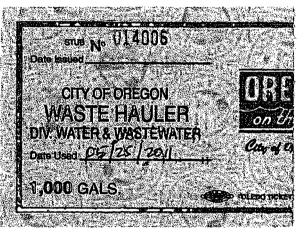


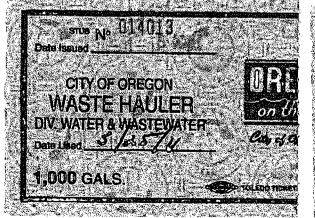


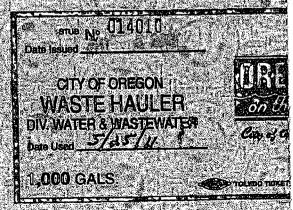


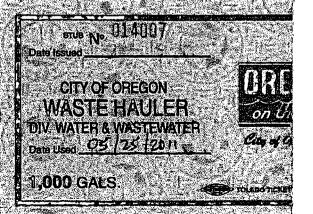


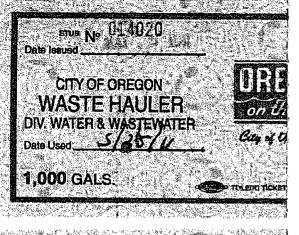


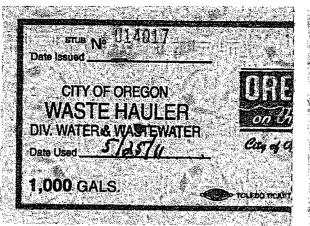


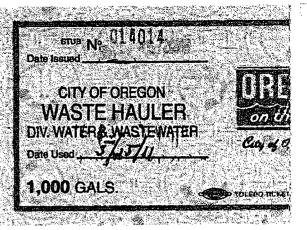


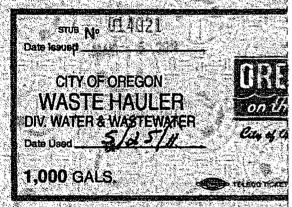


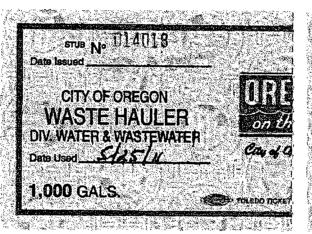


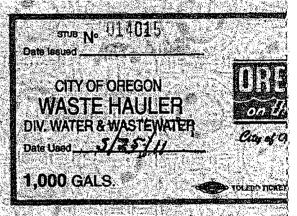


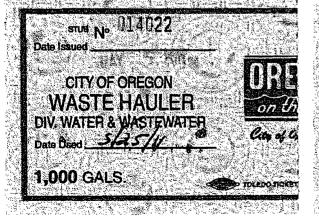


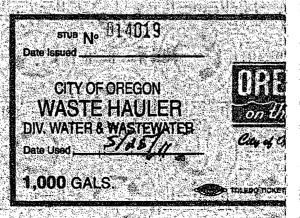


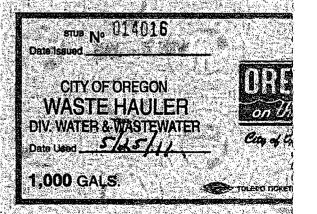










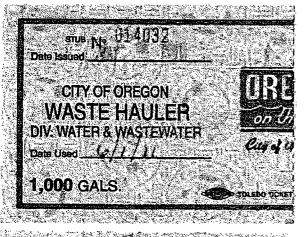


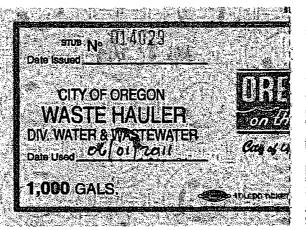
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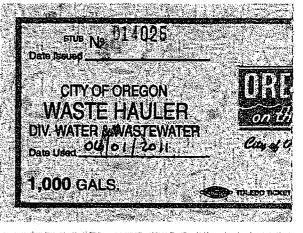
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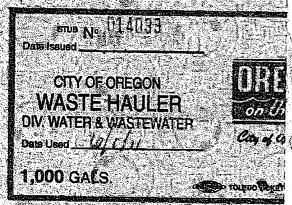
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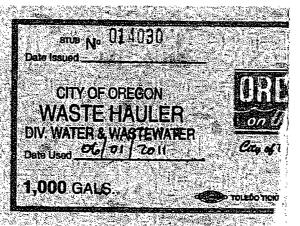
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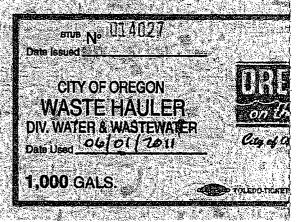


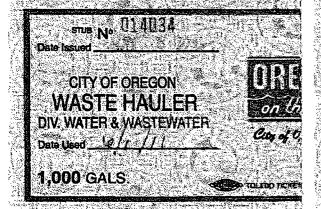


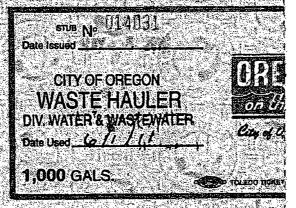


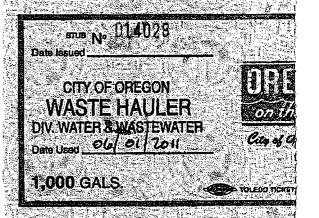


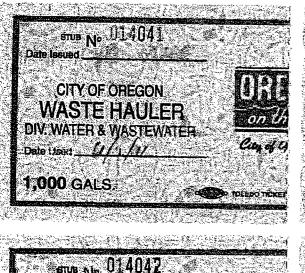


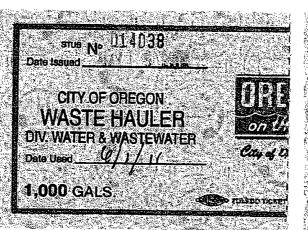


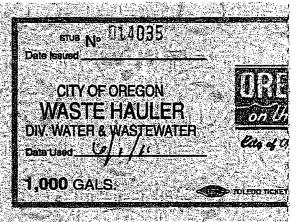


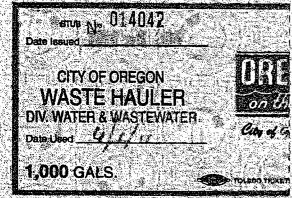


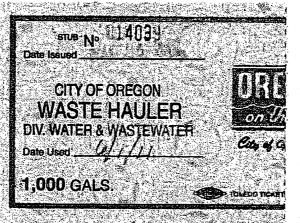


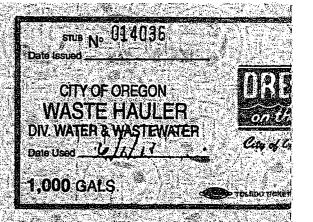


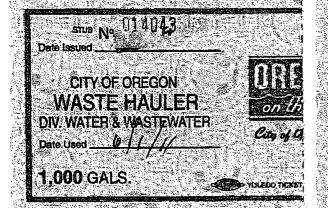


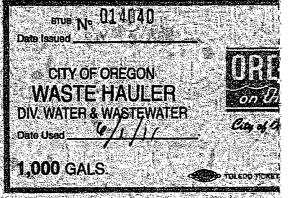


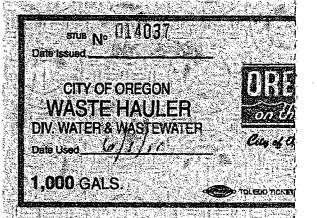


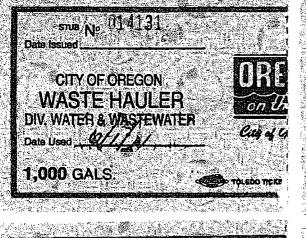


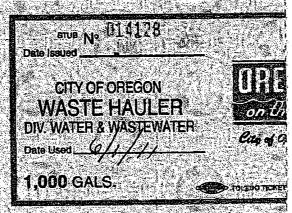


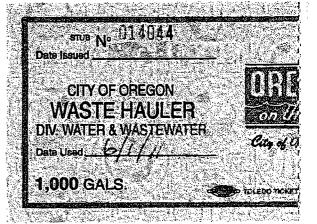


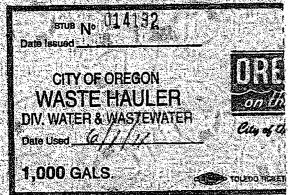


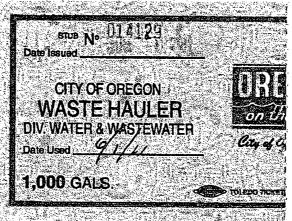


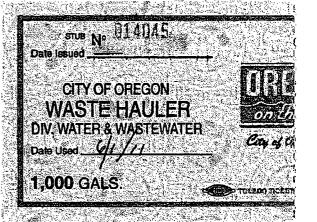


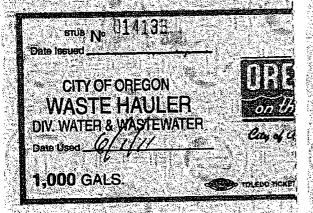


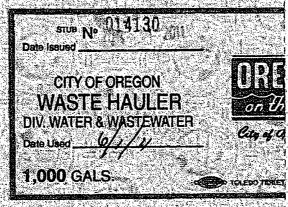


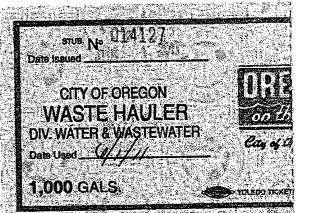


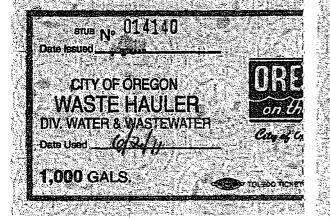


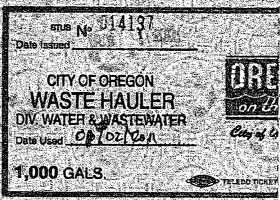


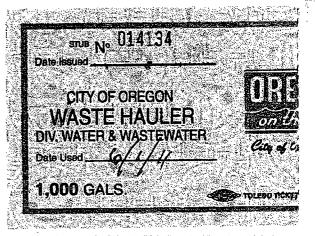


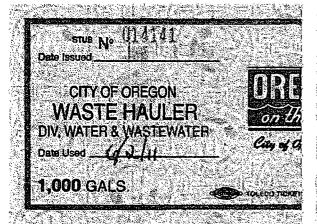


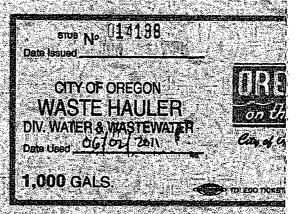


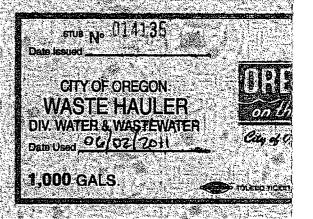


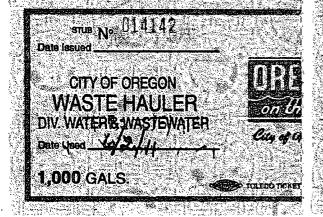


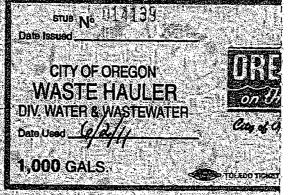


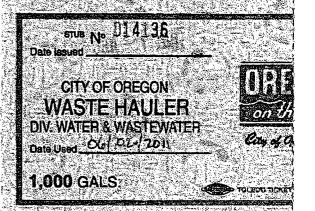




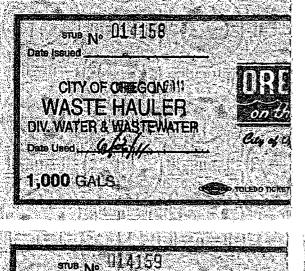


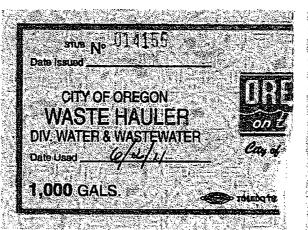


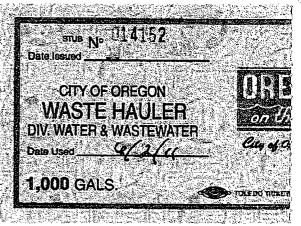


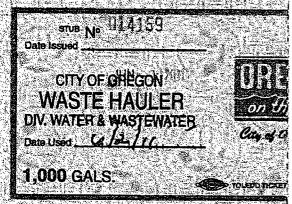


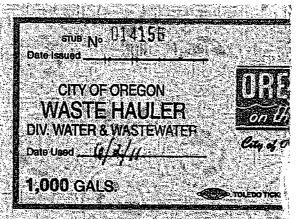


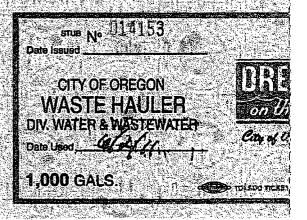


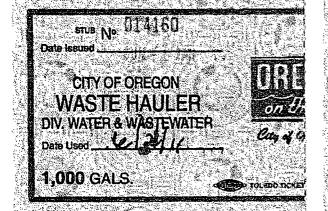


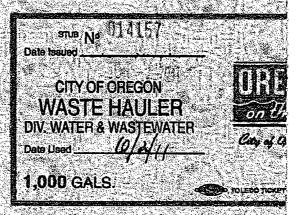


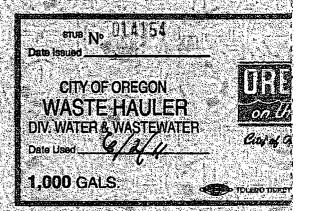


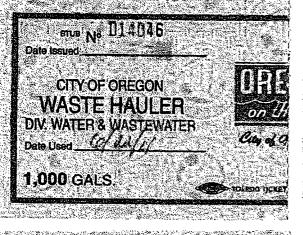


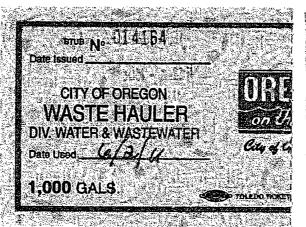


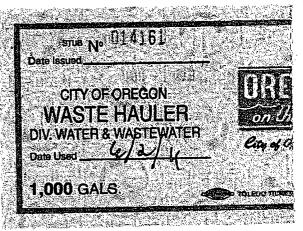


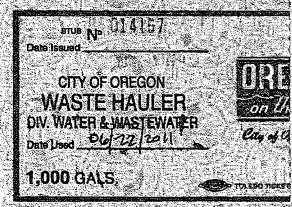


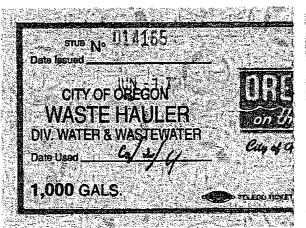


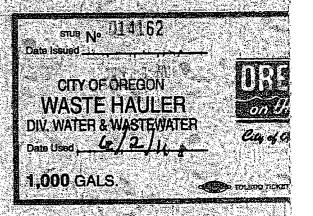


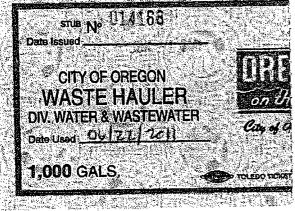


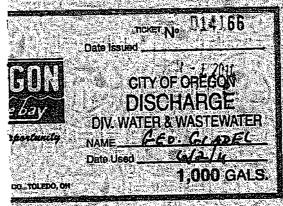


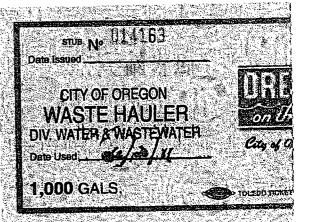


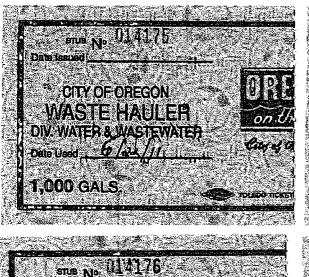


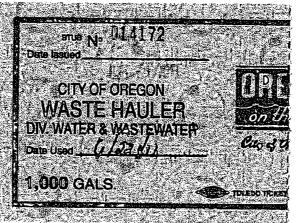


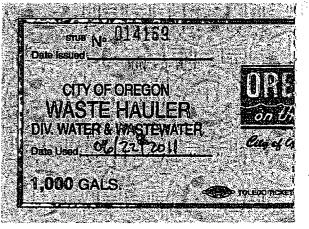


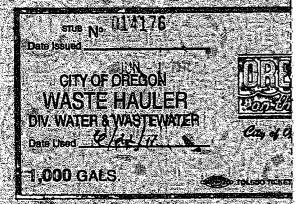


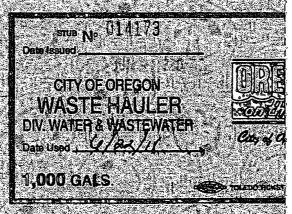


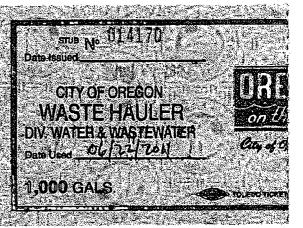


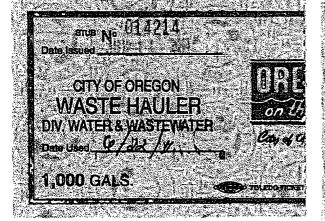


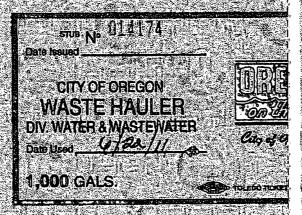


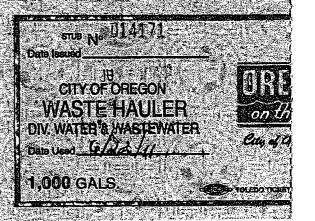


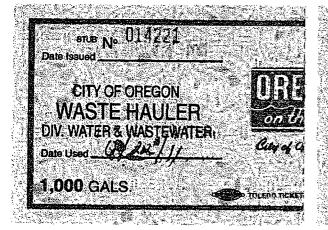


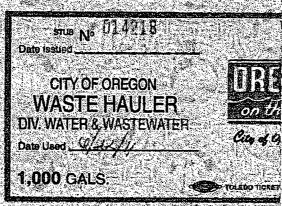


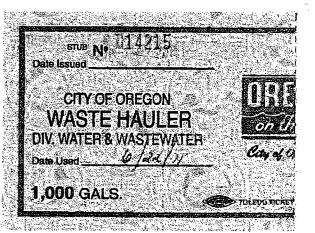


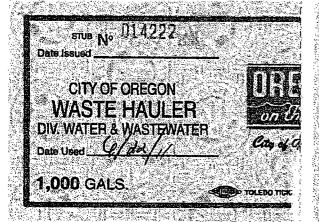


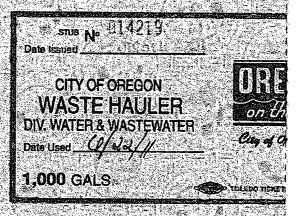


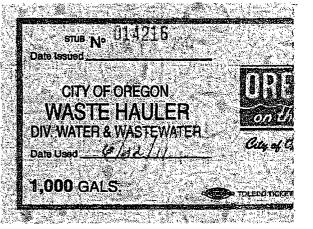


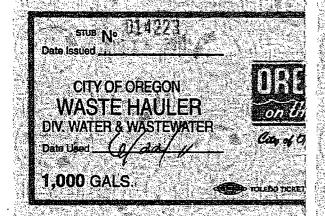


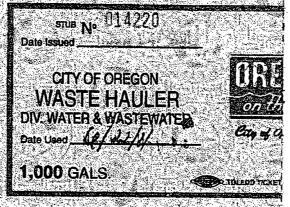


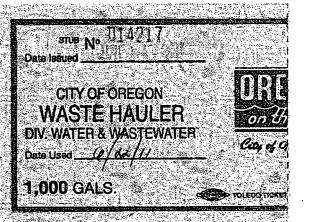


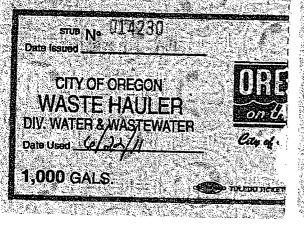


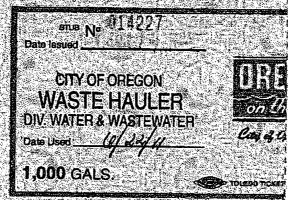


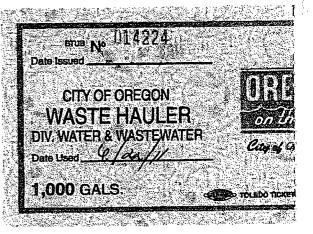


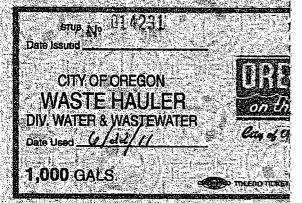


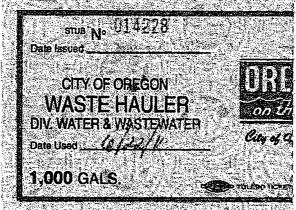


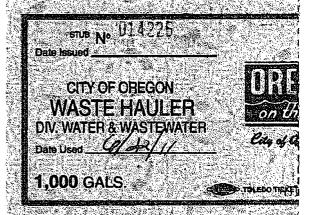


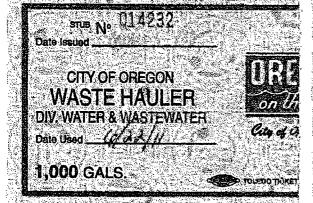


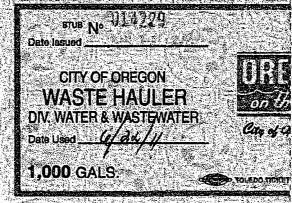








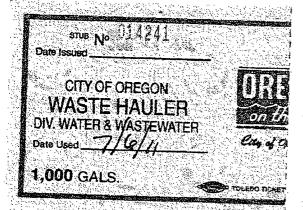


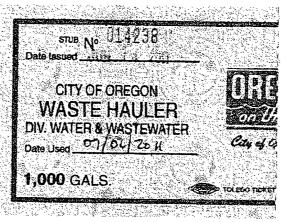


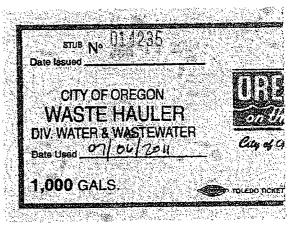


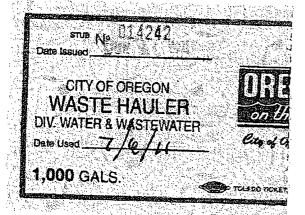
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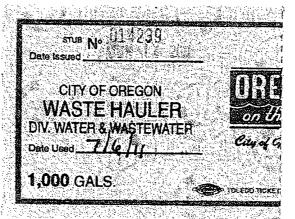
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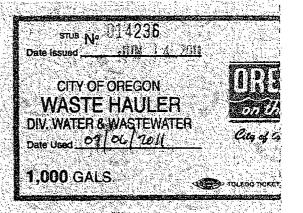


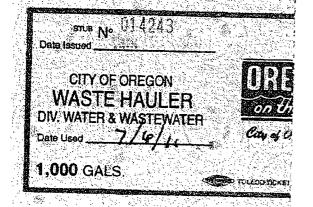


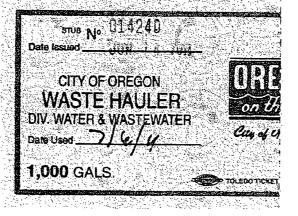


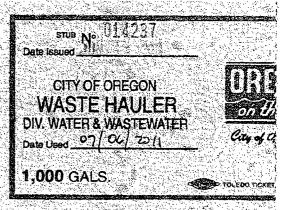


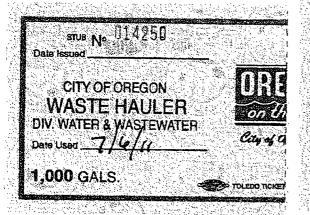


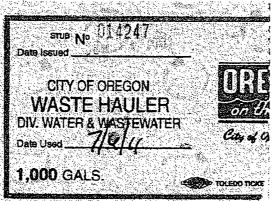


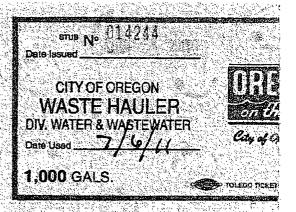


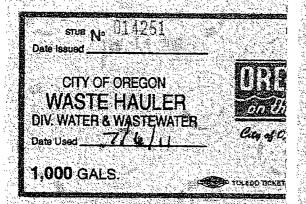


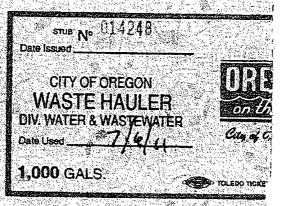


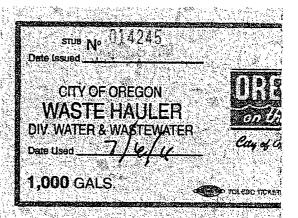




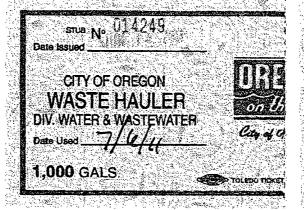


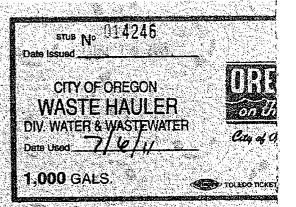




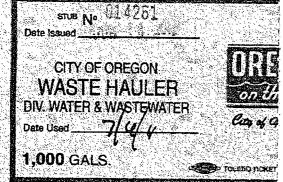


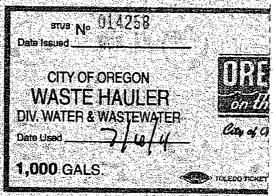
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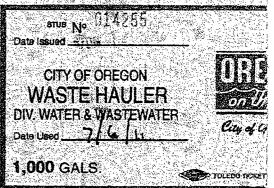




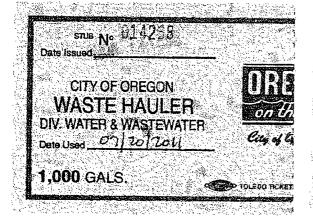


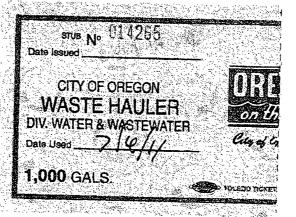


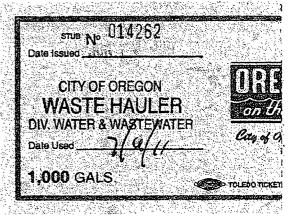


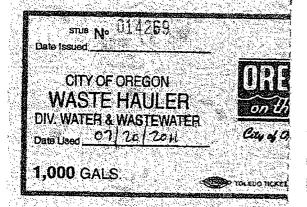


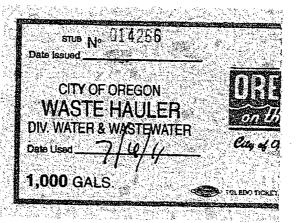
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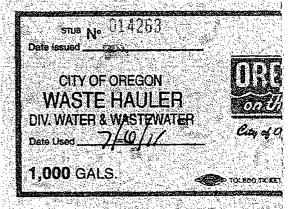


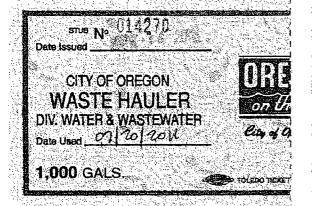


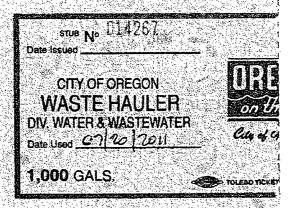


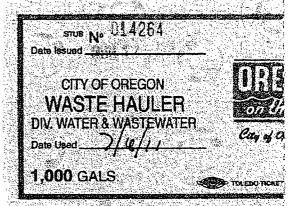


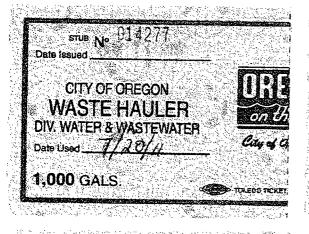


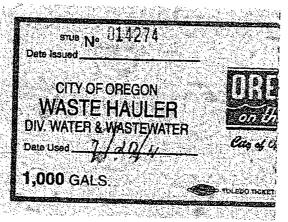


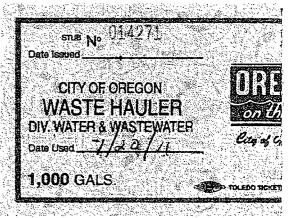


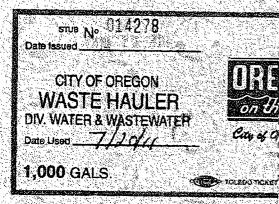


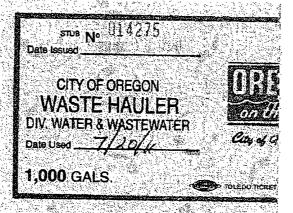


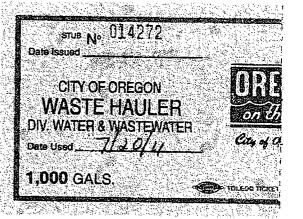


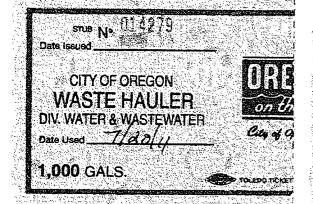


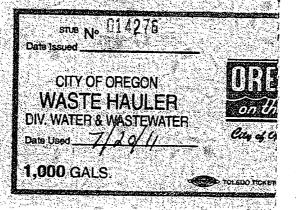


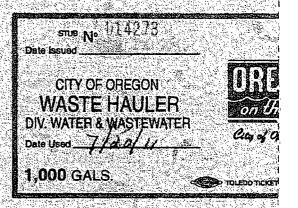


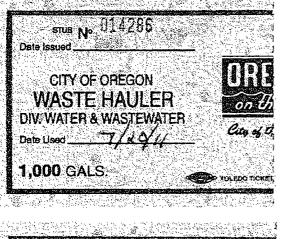


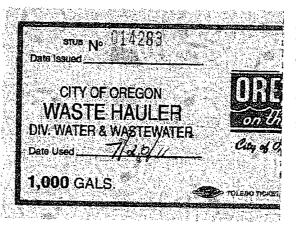


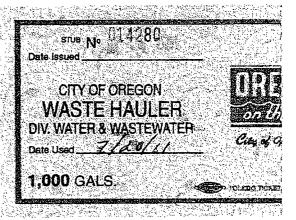


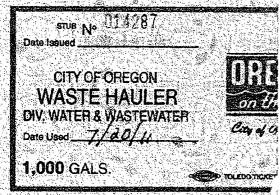


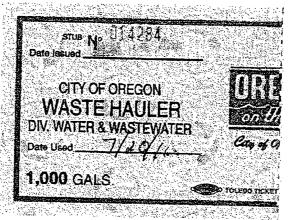


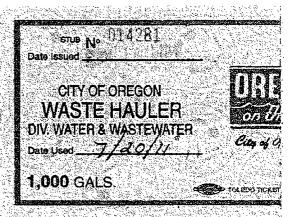


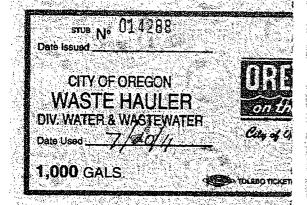


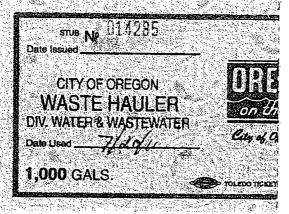


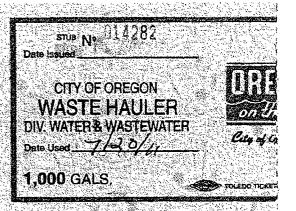




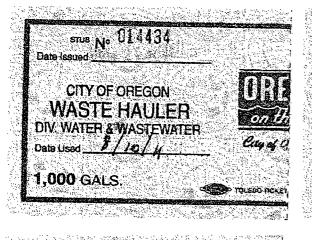


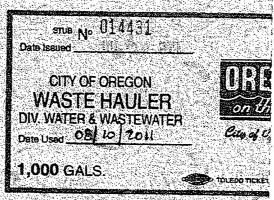


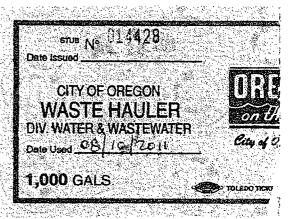


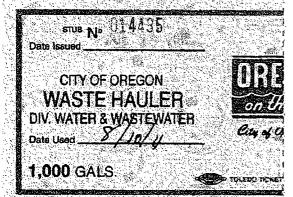


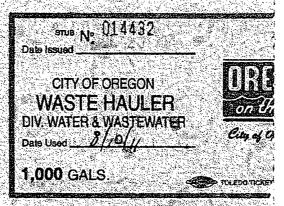


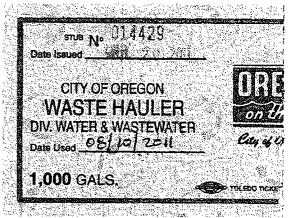


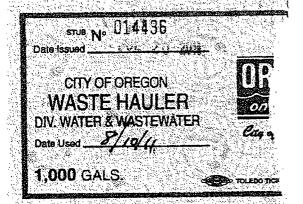


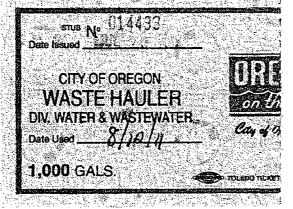


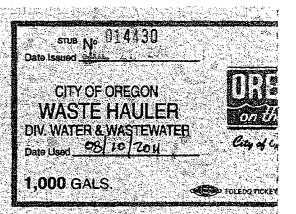


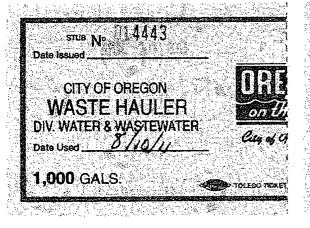


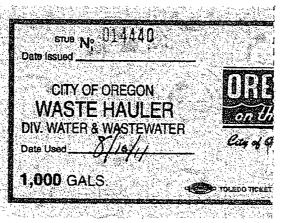


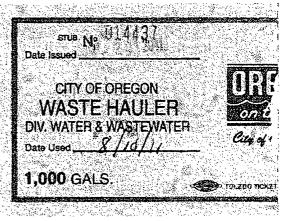


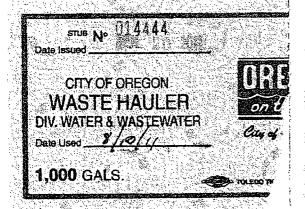


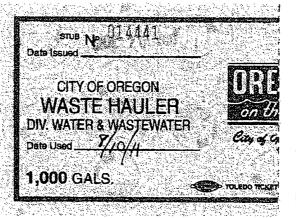


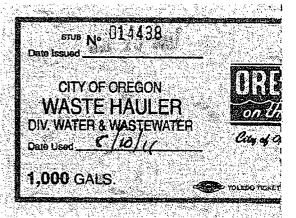


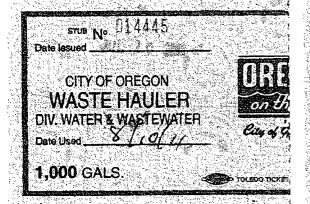


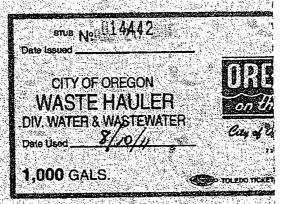


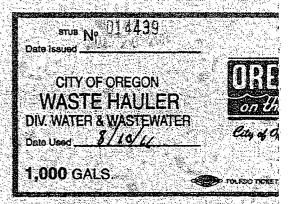






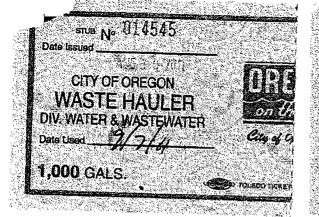


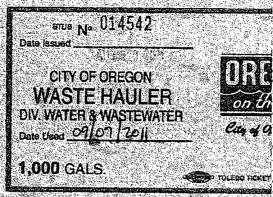


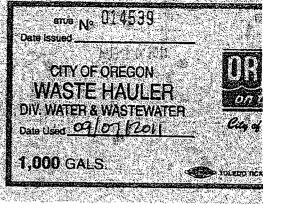


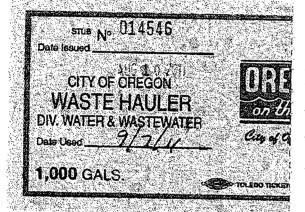
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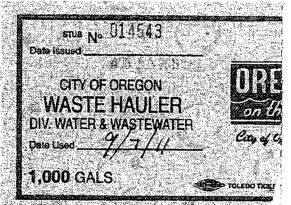
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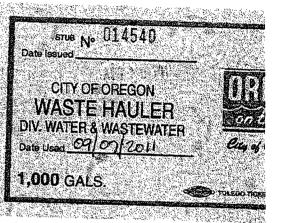


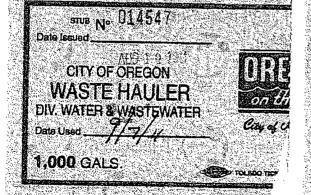


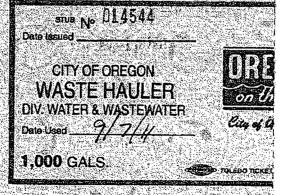


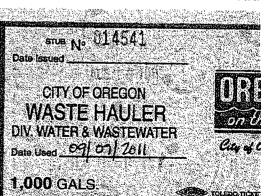












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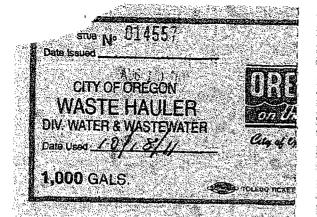
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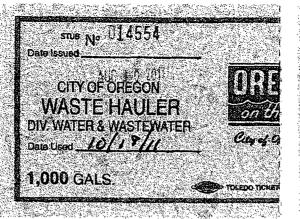
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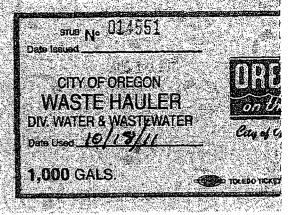
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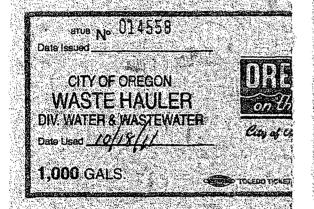
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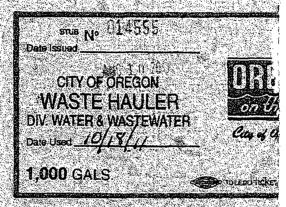
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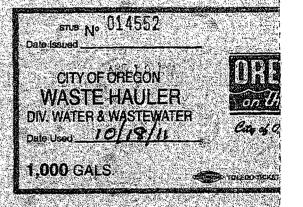


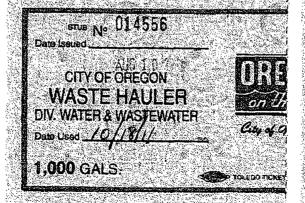


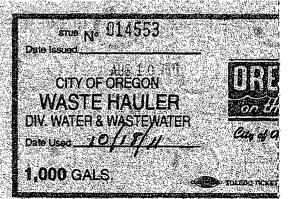












## Geo Gradel Company Westover Landfill Oregon Waste Water Treatment Plant Lab Tracking Sheet

2011

DATE	BOD mg/l	COD mg/l	T.Susp. Solids mg/l	Total Phosph. mg/l	pH S.U.	Discharge Volume Gallons
05/04/11	878	1,800	N/A	N/A	N/A	9,000
05/05/11	68	515				32,000
05/06/11	77	744			The state of the s	28,000
05/11/11	61	962				32,000
05/25/11	72	370				28,000
06/01/11	63	379				28,000
06/02/11	55	607				32,000



JONES & HENRY LABORATORIES, INC. / 2567 TRACY ROAD, NORTHWOOD, OHIO 43619 / (419) 666-0411

June 14, 2011

JUN 1 6 2011

**Bowser Morner** P.O. Box 838 Toledo, OH 43697-0838 ATTN: Mr. Tom Kiger

Below are the results of analysis of the indicated sample(s) submitted to this laboratory:

Project: Westover Landfill

Purchase order number: 28-D013284

Project account code: 140

Sample I.D. AF97601

Location Description: Metal Pipe Mouth Soil

Sample Collector: CLIENT

Collection Date: 6/1/2011 Submittal Time: 14:36

Collection Time: Received by: MLE

Lab Submittal Date: 6/06/2011 Location code: BOMO

Validated by: FD

Validation date: 6/14/2011

TEST PARAMETER	RESULT	UNITS	PQL	AN DATE	AN	REF METHOD
SOLIDS, DRY, 104 DEG C	72.5	%	0.01	06/08/11	EMS	SM18 2540 G
ARSENIC, TOTAL	9.1	mg/kg	2.0	06/08/11	VPW	200.7/6010
BARIUM, TOTAL	48.3	mg/kg	2.0	06/08/11	VPW	200.7/6010
CADMIUM, TOTAL	Not detected	mg/kg	1.0	06/08/11	VPW	200.7/6010
CHROMIUM, TOTAL	19.6	mg/kg	2.0	06/08/11	VPW	200.7/6010
EAD, TOTAL	40.0	mg/kg	2.0	06/08/11	VPW	200.7/6010
MERCURY, TOTAL	Not detected	mg/kg	0.5	06/10/11	PML	EPA7470
SELENIUM, TOTAL	Not detected	mg/kg	2.0	06/08/11	VPW	200.7/6010
ILVER, TOTAL	Not detected	mg/kg	2.0	06/08/11	VPW	200.7/6010
OCs by GCMS		mg/kg		06/13/11	ND	EPA 8260B
CETONE	Not detected	mg/kg	2.7	06/13/11	ND	EPA 8260B
CRYLONITRILE	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
ENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ROMODICHLOROMETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ROMOFORM	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ROMOMETHANE	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
-BUTANONE (MEK)	7.1	mg/kg	0.53	06/13/11	ND	EPA 8260B
ARBON DISULFIDE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ARBON TETRACHLORIDE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
HLOROBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
HLOROETHANE	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
-CHLOROETHYL VINYL ETHER	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
HLOROFORM	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
HLOROMETHANE	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
IBROMOCHLOROMETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ICHLORODIFLUOROMETHANE	Not detected	mg/kg	0.53	06/13/11	ND	EPA 8260B
,1-DICHLOROETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
2-DICHLOROETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1-DICHLOROETHENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,2-DICHLOROETHENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
,2-DICHLOROETHENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
-DICHLOROPROPANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B

Sample I.D. AF97601

Location Description: Metal Pipe Mouth Soil

Sample Collector: CLIENT Lab Submittal Date: 6/06/2011 Collection Date: 6/1/2011 Submittal Time: 14:36

Collection Time: Received by: MLE

Location code: BOMO

Validated by: FD

Validation date: 6/14/2011

TWOT DAD AND THE D	DECLUA	LINUTE	D(3)	ANDATE	437	Diri Mimiron
TEST PARAMETER	RESULT Not detected	UNITS	PQL	AN DATE	AN	REF METHOD
c-1,3-DICHLOROPROPENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
t-1,3-DICHLOROPROPENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ETHYLBÉNZENÉ	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,2-DIBROMOETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,2-DIBROMO-3-CHLOROPROPANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ETHYL METHACRYLATE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
2-HEXANONE	Not detected	mg/kg	0.53	06/13/11	ND	EPA 8260B
METHYLENE CHLORIDE	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
4-METHYL-2-PENTANONE (MIBK)	Not detected	mg/kg	1.1	06/13/11	ND	EPA 8260B
METHYL TERT-BUTYL ETHER	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
STYRENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,1,2,2-TETRACHLOROETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
TETRACHLOROETHENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
TETRAHYDROFURAN	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
TOLUENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,1,1-TRICHLOROETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,1,2-TRICHLOROETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
TRICHLOROETHENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
TRICHLOROFLUOROMETHANE	Not detected	mg/kg	0.22	06/13/11	ND	EPA 8260B
VINYL ACETATE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
VINYL CHLORIDE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
m+p-XYLENE	0.22	mg/kg	0.11	06/13/11	ND	EPA 8260B
o-XYLENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
DIBROMOMETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,2-DICHLOROBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,3-DICHLOROBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,4-DICHLOROBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
t-1,4-DICHLORO-2-BUTENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ETHYL ETHER	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
METHYL IODIDE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
NAPHTHALENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,1,1,2-TETRACHLOROETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,2,3-TRICHLOROPROPANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,3-DICHLOROPROPANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
HEXACHLOROBUTADIENE	Not detected	ing/kg	0.11	06/13/11	ND	EPA 8260B
ISOPROPYLBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
BROMOCHLOROMETHANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
2,2-DICHLOROPROPANE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
2,2-DICHEOROFROFANE 2-CHLOROTOLUENE	Not detected		0.11	06/13/11	ND	
4-CHLOROTOLUENE	Not detected	mg/kg	0.11		ND	EPA 8260B
		mg/kg				EPA 8260B
1,2,3-TRICHLOROBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,2,4-TRICHLOROBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,2,4-TRIMETHYLBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
1,3,5-TRIMETHYLBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
BROMOBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
N-PROPYLBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
N-BUTYLBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
ec-BUTYLBENZENE	Not detected	mg/kg	0.11	06/13/11	ND	EPA 8260B
The state of the s	Mina I annual	(l	0.11	06/13/11	ND	EDA POZOD
rt-BUTYLBENZENE 'SOPROPYLTOLUENE	Not detected Not detected	mg/kg mg/kg	0.11 0.11	06/13/11	ND	EPA 8260B EPA 8260B